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# The Impact of Service Projects on Micro-Enterprises in Mexican Marginalised Communities

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## SUMMARY

This chapter presents the results of an action research project that took place in Mexico between January and June 2001 using social service as a driving force. It involved students from the Universidad Autónoma de Baja California and the Universidad Autónoma de Nayarit working with 100 micro-enterprises defined as marginalised due to geographic location, lack of human resources and weak financial standing. It was based on the premise that social service, guided by academics committed to quality, allows students to provide technical assistance to enterprising people who lack institutional supports, but who are backed by a history of effort and hard work as their most valuable assets.

The results of the project are twofold. All the micro-enterprises that were assisted have shown positive profitability levels; in addition, 36 per cent showed learning progress. This indicates that the future development and competitiveness of this sector can be greatly enhanced by co-operation between enterprises and higher education institutions. Such co-operation allows for the dissemination of technical and entrepreneurial knowledge to the micro-enterprises. In relation to the students, the project's results demonstrate that it is possible to implement new educational strategies that simultaneously contribute to community development, through better planning and organisation of social work, and to the production of new research and learning skills.

University-based social service is shown to have a positive impact on local economies, which confirms the potential of this project to contribute to local development and better living standards in poor communities.

## Introduction

Mexico has more than two million higher education students. Among them, approximately 300 000 take part annually in social service projects that have been arranged by private and public organisations and higher education institutions. These forms of social service are a prerequisite for students to graduate from all undergraduate programmes offered by higher education institutions in the country. Social service in Mexico has been seen as both a learning experience for the students and as a form of repayment to society from those who have had the privilege of accessing higher education. However, probably because this practice was introduced a long time ago, most people have lost sight of the purposes and values that were at the heart of this conceptualisation of social service when it originated. This explains why some students consider social service a hindrance and look for loopholes and strategies to avoid participating. Recent surveys indicate that among the different areas in which social service can be performed at Mexican higher education institutions, the social sector has the lowest level of participation (twelve per cent) while projects focused on the public sector have both greater rates of participation and efficiency (Sanchez & Mungaray 1999).

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This chapter focuses on the experience and results of an action research project that took place between January and June 2001 and which involved senior economics, business administration and accountancy students from the Universidad Autónoma de Baja California and the Universidad Autónoma de Nayarit providing technical assistance to a number of micro-enterprises in the food and beverages and metal-mechanic sector. The chapter advances two arguments. On the one hand, it argues that the development of micro and small enterprises depends on structured co-operation that allows for the transfer and dissemination of technical knowledge from local higher education institutions into otherwise marginalised micro-enterprises. The corollary of this argument is that universities and civil society actors can generate an enabling industrial policy for micro-enterprises that supports their participation in the market through the technical education of their owners. On the other hand, the chapter argues that it is possible to develop new strategies for higher education to contribute to community development through a better planned and organised social service programme. This programme would have to be developed from a perspective that sees research and social service as a means to learning.

## Social service as a community-based research and learning experience

The project aimed, on the one hand, to demonstrate that the technical assistance provided by students, in the context of social service, could improve the profit levels of micro-enterprises and teach their owners ways in which to be competitive. On the other hand, it aimed to create through social service and research a situation in which students could learn about their future professions. The selection, training and supervision process of students willing to participate in a project with these aims took place between December 2000 and August 2001, and culminated in the selection of 40 students from the universities of Baja California and Nayarit. The micro-enterprises that took part in the project were selected from among 160 enterprises in the food and beverage, and scrap metal sectors operating in geographically marginalised locations. The criteria used to define marginalisation were: lack of public services, lack of institutional/government support, owners with an educational level of Grade 12 or lower, and enterprises with no accounting records. Both in the states of Baja California and Nayarit the enterprises were located in remote areas and were identified through student visits.

Students were recruited through an open invitation at both universities. Professors associated with the project interviewed and selected the candidates. Twenty students per university were selected. Of the students from the Universidad Autónoma de Baja California, twelve were studying economics, four business administration and one accountancy. Of the 20 students from the Universidad Autónoma de Nayarit, five were studying economics, six accountancy and nine business administration. All of them had successfully completed at least 75 per cent of the required credits in their respective programmes.

Selected students had to take another ten courses taught by professors or researchers involved in the project. These courses were focused on the macro-economic context, local development, market structures and strategies, costs and production, finances and project evaluation, institutions and development, international trade, financial statements, and regional analysis. The courses were not credit bearing but were a pre-requisite for entrance into the project, in which it was necessary to accomplish the 480 hours of social service work in order to graduate. The fact that students came from three different programmes, and that the focus of the project was micro-enterprises in marginalised areas, created fertile ground for an interdisciplinary experience in the fields of sociology and economics. Students were assessed through examinations on each of the introductory topics and through the performance of the micro-enterprise they had assisted during the period of their social service.

Two opinion surveys were conducted, one after the students were selected, and the other at the end of their period of social service, to find out what they thought of the social service and of their role in the project. The first survey indicated that 51 per cent of the students thought they could learn something useful and interesting for their future professional development. The rest thought that social

service was a way to contribute to community development, to support poorer people and to pay back society for their studies. In the second survey 82 per cent of the students found that their work had helped the micro-enterprises improve their performance. All respondents found they had learnt something useful for their professional future and that their work had had a positive impact on the enterprises.

Students selected the enterprises aided by their professors. They visited the communities, interviewed neighbours and identified possible enterprises for the project. In Baja California, out of 103 micro-enterprises selected, 70 signed agreements to receive technical assistance. Finally, for reasons that ranged from an enterprise closing down thanks to the owner getting a job offer, to the seasonal nature of the product, to illness, to a spouse spurning help, to migration, only 53 enterprises stayed in the project. In the state of Nayarit, out of 90 selected enterprises, 79 signed agreements and 50 stayed in the programme.

The focus on learning and research made the collection of information in the ledger book a key tool of the project. The requirement to enter all operations in the ledger helped to foster business discipline among the owners of the micro-enterprises in the process (Mansfield 1997). Aided by their professors, students redesigned the ledger using terminology familiar to each of the owners taking part in the project. This made the ledger book more accessible and enabled students to introduce the owners of micro-enterprises to business concepts. At the same time, the information entered in the ledgers made possible the preparation of financial statements, cost analyses, and estimation of demand, production and financial costs, ratios and indicators, which allowed for an economic and financial evaluation on the basis of the determination of production optimums and proforma financial statements. The use of the ledger book had another function: it helped in assessing the learning that took place during the assistance period.

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The reporting schedule was demanding on the professors to whom the students had to report at least once a week. However, each of the professors had a research project in progress of which these exercises formed part. By the end of the first year, the project had generated several publications, including three books and several research articles.

At the end of the first six months, students and professors from both universities met for three days in Tepic, Nayarit, to share experiences between the groups. Each student made a presentation on his/her experience, on what they had accomplished and learnt. For the students this became one of the highlights of the project. Not only had they learnt to be consultants for micro-enterprises, but they also had a clearer sense of the contents of their degrees, and of social and community development issues.

## The economic context for social service

Why does social service have such potential in the context of micro-enterprise development in Mexico? The 1999 Economic Census indicated that in Mexico, as in the rest of the world, 99 per cent of all entrepreneurial units were micro and small companies. Micro-entrepreneurs, however, do not have the necessary savings to buy sufficient supplies. They do not have access to credit – and if they did, intermediary costs are much too high for them. Due to family pressures, they cannot practice economies of scale by optimising costs. Micro-entrepreneurs work seven-day weeks to cover the payroll so as to keep their companies going, and when they manage to save some money, instead of investing in machinery, they have to respond to postponed family needs.

Macro-economic policy has an impact on this situation. At the end of 1999, the Ministry of Social Development of the Mexican Government (SEDESOL) indicated that 20 million Mexicans were linked to export-oriented activities and enjoyed very good living standards. A further 35 million Mexicans linked to traditional activities had poorly paid jobs, and there were 40 million Mexicans linked to all types of activities who lived in conditions of poverty, defined on the basis of families of five or more members with up to two minimum wages (Moctezuma 1999). Thus, one of the consequences of the lack of balanced entrepreneurial development at the regional and sectoral level has been an excessive concentration of wealth in the hands of a minority that has derived its wealth from export businesses, and has therefore constrained the availability of savings for internal investments.

This growing concentration of income in one sector has raised the issue of the need for a less inflationary macro-economic strategy that yields space to sectorally and regionally inclusive micro-economic strategies, and that manages politics and the economy to serve people (Schumacher 1999). A macro-economic strategy that does not create the necessary conditions for a broader and more inclusive strategy for entrepreneurial development (which stimulates the forces of competition and wellbeing) makes the government stronger without strengthening society (Mungaray & Palacio 2000). Regional industrial policies based on the people's decisions and not exclusively on governmental perspectives make the economic promotion of micro and small companies more possible.

In this situation, why not promote an inclusive and enabling national industrial policy based on partnerships that take cognisance of the community and social outreach commitments of universities? Learning is how micro-enterprises can evolve from struggling companies into viable enterprises. Micro-entrepreneurs, many of whom are illiterate, find banking rules difficult to understand, and they cannot grasp electronic technologies, market rules and productivity assessment techniques (Mungaray & Ocegueda 2000). They need technical assistance adapted to their specific type of micro-enterprise in order to translate industrial policy into an investment or production decision.

Few institutions in Mexico are better placed than higher education institutions to rise to the challenge of promoting entrepreneurial learning and therefore helping society to meet its development needs. As a matter of fact, Mexico's contribution to higher education internationally is in the use of social service as a way of helping those in need, by providing knowledge and services, and as a way of enforcing higher education's obligations in a social pact (Mungaray & Ocegueda 2000).

## The impact of technical assistance offered through social service

The financial results of the marginalised micro-enterprises that were assisted by the social service programme suggest that the current conditions of macro-economic stability are the main barrier to the development of this type of company. In other words, the problems faced by micro-enterprises arise from their financial difficulties in enlarging their factors of production and improving their technological base, rather than from problems of productivity or the level of effort they put into their operations. Any strategy to develop this type of economic unit must combine financial support for the gradual enlargement of the scale of production and the incorporation of technology suitable to their market size, with entrepreneurial training programmes aimed at ensuring the efficient use of their current and future resources.

Often the differences in how information is used in the management of each business reflects an under-utilisation of assets that gives rise to idle capacities. This problem may be explained by an entrepreneurial culture among the owners that eschews business plans, evaluations and follow-up measures. The analysis of net profit margins (net profit/net sales), shows that entrepreneurs are completely ignorant of the profitability of their business and do not have alternative information that could enable them to decide to invest in another market segment.

The learning of business skills is an alternative methodology to increase micro-entrepreneurial competitiveness. This ranges from the accumulation of knowledge and skills, including experience, to the creation of capabilities and innovative capacity among the entrepreneurs. The development of business skills reduces the costs per production unit due to increased productivity of the factors (Mungaray 1997).

In order to measure the effects of the learning experience among the entrepreneurs, the students developed estimated functions which correlated learning or experience indicators with productive efficiency indicators such as mean cost and productivity. To do the measurement, the accumulated daily production for the

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production days of each micro-company was registered in a database and this was considered as an indicator of experience in production and learning (Andrés 1954, Teplitz 1991). The estimated learning rates were compared with indicators on the educational attainment of the company's owner, her/his workers and the time for which the company had been operating, which allowed one to observe if the learning rates of micro-enterprises were related to the education levels of their owners and employees, or to their experience, which was defined as length of operation. Using this methodology in a sample of 64 micro-enterprises 23 (or 36 per cent of the sample), reflected varying degrees of entrepreneurial learning, through a reduction of mean costs or the increase of productivity. This in turn points to the effectiveness of the technical assistance provided by the university students in their social service year.

Despite the fact that micro-enterprises maintain a low investment in fixed assets and operate in the informal sector, it is possible to apply economic evaluation techniques to them, if the accounting and taxation aspects of the technique are adjusted. It is noteworthy that all the micro-companies that were part of the project obtained a rate of return higher than their financing costs and a positive net present value, which means that they have an acceptable micro-profitability in economic terms and therefore would be in a position to gain access to micro-financing, should there be such a financial system in Mexico. In other words, the results of these micro-enterprises showed that if these companies had the moral and social solvency to be taken seriously, they have the capacity, potentially, to repay credit in the commercial banking system.

## Conclusion

This chapter shows that despite all the institutional drawbacks experienced by micro-enterprises during the macro-economic stabilisation process, the fact that they operate in neighbourhood niche markets has made it possible for them to make money thanks to their captive market and their almost on-demand service. This has allowed for the profits on their production functions to remain constant. Healthy micro-finance and micro-profitability have enabled micro-enterprises to learn from the technical assistance offered to them through social service. All the micro-enterprises that were assisted have positive profitability levels and in addition, 36 per cent showed learning progress. This points to the importance of social service programmes at universities in the dissemination of entrepreneurial knowledge, and their potential to improve competitiveness and help develop this type of company. Through this social service project, the university helps make the macro-economic environment less hostile to micro-enterprises and raises the issue of the importance of the internal market as a part of the national entrepreneurial development strategy.

The work done at the universities of Baja California and Nayarit in the organisation of an integrated experience of research, learning-induction and assistance to micro-enterprises of marginalised zones was an enlightening task. It provided the opportunity for a strong interaction between professors and students through

professional knowledge used within a social service programme. It reinforced the premise that social service, guided by academics committed to quality (Salemi et al. 2001), allows students to provide technical assistance to enterprising people who lack institutional support, but who are backed by a history of effort and hard work as their most valuable assets.

The social service experience not only exerted a major curricular influence on academic programmes but also on pedagogical issues, by generating far more active student participation in the projects (Becker & Watts 2001). Further stages in the programme should be able to improve the rate at which students are trained as micro-enterprise consultants as well as the process of selection of enterprises. All of this should eventually result in greater learning for the students as well as in greater overall benefit to the companies that gained from technical assistance.

The improvement, through university-based social service, of the production and profitability of micro-enterprises by using appropriate knowledge and skills, will have a positive impact on the local economies, which confirms the potential that this project has to contribute to local development and better living standards in poor communities.

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## Note

- <sup>1</sup> We are grateful for the financial support of the Ford Foundation for the development of the project.